

Search for ultrahigh-energy gamma rays from gamma-ray bursts using the Carpet-3 EAS array

The paper presents the first results of the search for ultra-high-energy gamma radiation from cosmic gamma-ray bursts based on the data from the Carpet-3 EAS array of the BNO INR RAS. The facility is located in the Baksan gorge at an altitude of 1700 m above sea level and consists of a ground-based array of and an underground muon detector with an area of 410 sq. m., which allows for the highly efficient selection of EAS initiated by primary photons with energies above 300 TeV. This work is of particular interest in connection with the observation of a photon-like event from the GRB221009A gamma-ray burst at the Carpet-3 EAS array.

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